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/*
Display.h - A simple track GPS to SD card logger. Display module.
TinyTrackGPS v0.14

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*/

#if ARDUINO >= 100
  #include "Arduino.h"
#else
  #include "WProgram.h"
#endif

#ifndef Display_h
#define Display_h

#include "config.h"

#if defined(DISPLAY_TYPE_LCD_16X2)
    #include <LiquidCrystal.h>
#elif defined(DISPLAY_TYPE_LCD_16X2_I2C)
    #include <LiquidCrystal_I2C.h>
#elif defined(DISPLAY_TYPE_SDD1306_128X64) || defined(DISPLAY_TYPE_SH1106_128X64)
    #define U8X8_HAVE_HW_I2C
    #include <U8x8lib.h>
    //#include <U8g2lib.h>
#elif defined(DISPLAY_TYPE_SDD1306_128X64_lcdgfx)
    #include <lcdgfx.h>
    #include <lcdgfx_gui.h>
#endif

enum Display_Type {
    SDD1306_128X64,     // Para usar pantalla OLED 0.96" I2C 128x64 pixels
    LCD_16X2,           // Para usar LCD 16 x 2 carateres.
    LCD_16X2_I2C        // Para usar LCD 16 x 2 carateres. I2C.
};

class Display {
    private:
        //byte _offset;
        byte _width;       // Width pixels or numbers of columns for LCD.
        byte _height;       // Height pixels os numbers of rows for LCD.
        Display_Type _screen;
```

```
        #if defined(DISPLAY_TYPE_LCD_16X2)
            LiquidCrystal* lcd;
        #elif defined(DISPLAY_TYPE_LCD_16X2_I2C)
            LiquidCrystal_I2C* lcd;
        #elif defined(DISPLAY_TYPE_SDD1306_128X64)
            //U8G2_SSD1306_128X64_NONAME_1_HW_I2C* u8g2_SSD1306;
            U8X8_SSD1306_128X64_NONAME_HW_I2C* u8x8_SSD1306;
        #elif defined(DISPLAY_TYPE_SH1106_128X64)
            U8X8_SH1106_128X64_NONAME_HW_I2C* u8x8_SH1106;
        #elif defined(DISPLAY_TYPE_SDD1306_128X64_lcdgfx)
            DisplaySSD1306_128x64_I2C* display;
        #elif defined(DISPLAY_TYPE_HX1230_96X68)
            U8G2_HX1230_96X68_1_3W_SW_SPI* u8g2_HX1230;
        #endif

    public:
        Display(Display_Type t = SDD1306_128X64);
        Display() = delete;                                 // Constructor por defecto.
        Display(const Display&) = delete;                   // Constructor de copia.

        void start();
        void clr();
        void print(int, int, const char[]);
        void print(int, const char[]);
        void print(const char[]);
        void print(const char[], const char[]);
        void print(const char[], const char[], const char[]);
        void print(const char[], const char[], const char[], const char[]);
        void wait_anin(unsigned int);
        void draw_wait(byte);
        void print_PChar(byte);
        void DrawLogo();
        void drawbattery(uint8_t);
        Display_Type display_type(){return _screen;};
};

extern const uint8_t TinyTrackGPS_font8x16[] PROGMEM;

#endif
```